

REMARKS

Substance of Telephonic Interview.

Applicants wish to express appreciation to Examiner Christopher Lavin for the courtesy of a telephonic interview held with Applicants' representative Michael Faibisch (Reg. No. 46,427) on September 25, 2006. In the interview the Examiner asserted that the invention of claims 16 and 17 is disclosed in the Kosmowski et al. reference (US 5,529,441), particularly with reference to Fig. 2. Applicants' representative agreed to consider the applicability of this reference, and to amend the claims if needed. No agreement was reached regarding the substance of an amendment.

General Remarks

Claims 16 - 18 and 20 - 24 are pending in the application. Claim 25 is canceled herein without prejudice or disclaimer. Claims 16 - 18 are currently amended with the self-explanatory amendments shown above. Support for the proposed amendments is found at Figs. 10A, 10B and at paragraphs [0133] – [0144] of the Patent Application Publication, *inter alia*. Note, for example, that via hole alignment patterns are shown in Fig. 10B as passing through the upper layer only, as compared to through holes 1024 which are shown as passing through several layers.

Applicants have carefully studied the Kosmowski et al. reference (US 5,529,441) discussed in the telephonic interview, which shows and describes drill coordinate optimization for multi-layered printed circuit boards. The holes (opening region 42) that are provided for

**SUPPLEMENTAL AMENDMENT UNDER 37 C.F.R. § 1.116**  
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alignment of subsequent drilling operations, pass through the upper layer and through several layers beneath the upper layer.

Claim 16 has been amended to distinctly point out that detecting is performed on at least two holes passing through the upper layer without passing through the lower layer located immediately beneath the upper layer. Claim 17 has been amended to point out that the receiving operation is performed on a multi-layered printed circuit board substrate in which at least one hole passes through the upper layer without passing through the lower layer located immediately beneath the upper layer. As noted above, nothing in Kosmowski et al. shows, describes or suggests employing openings that only pass through the upper layer without passing through the lower layer immediately beneath the upper layer.

In view of the foregoing, and arguments advanced in previous responses, Applicants respectfully submit that claims 16 and 17 are patentable over the prior art of record, including the Kosmowski et al. and request that the rejection of these claims be withdrawn. Claims 18, and 20 – 24 which depend directly and ultimately from claim 17 are patentable at least by virtue of their dependency from claim 17.

In view of the foregoing, this application is believed to be in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

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Applicant herewith petitions the Director of the USPTO to extend the time for reply to the above-identified Office Action for an appropriate length of time if necessary. Unless a check is attached, any fee due under 37 U.S.C. § 1.17(a) is being paid via the USPTO Electronic Filing System (EFS). The USPTO is also directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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**23373**

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